



Purchasing Agent: Glendon Mitchell

**Item: GLASS FIBER REINFORCED CONCRETE (GFRC) COMMUNICATIONS  
EQUIPMENT SHELTERS**

Vendor: 18846F Fibrebond Corporation  
1300 Davenport Drive  
Minden LA 71055

Internet Homepage:

Telephone: (800) 824-2614

Fax number: (318) 377-9475

Contact: Beverly Hood

Email address:

Brand/trade name:

Price: See Attached Price List  
Terms: 1% 10 Net 30  
Effective dates: 11/01/99 through 10/31/00  
Days required for delivery: 56 Days  
Price guarantee period: 90 Days  
Minimum order: No Minimum Order  
Min shipment without charges: None  
Other conditions:

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**THIS IS A NEW CONTRACT. ALSO REFER TO MA1135.**

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Savings on transportation costs may be available. Contact Dan Reisner, State Freight Manager, at (801)538-3215 for quotation and shipping instructions.

This contract covers only those items listed in the price schedule. It is the responsibility of the agency to ensure that other items purchased are invoiced separately. State agencies will place orders directly with the vendor (creating a PG in Finet) and make payments for the same on a PV referencing the original PG. Agencies will return to the vendor any invoice which reflects incorrect pricing.



## **GENERAL SPECIFICATIONS**

MINIMUM SPECIFICATIONS FOR GLASS FIBER REINFORCED CONCRETE (GFRC) EQUIPMENT SHELTER

**THE SPECIFICATIONS CONTAINED HEREIN ENCOMPASS THE LABOR, EQUIPMENT, AND MATERIALS FOR THE FABRICATION OF A TRANSPORTABLE, PREFABRICATED GLASS FIBER REINFORCED CONCRETE EQUIPMENT SHELTER.**

## **GENERAL DESCRIPTION**

THE EQUIPMENT SHELTER WILL BE PREASSEMBLED AND COMPLETE AS SPECIFIED WHEN TRANSPORTED TO THE SITE. BASIC CONSTRUCTION WILL CONSIST OF MONOLITHIC WALLS, FLOOR, AND ROOF INCORPORATING SANDWICH PANEL CONSTRUCTION, GFRC OUTER AND INNER SKINS, AND RIBS SPACED TO MEET THE DESIGN LOAD CRITERIA. THE BUILDING WILL HAVE EXPOSED AGGREGATE OUTER FINISH AND A paneled interior to provide an aesthetic value to the structure.

### **ROOF:**

THE ROOF WILL BE DESIGNED TO SUPPORT A MINIMUM LIVE LOAD OF 120 PSF FOR ROOF SPANS UP TO 12' WIDE.

THE ROOF WILL HAVE A MINIMUM PITCH OF 1/8" OR 1/4" SLOPE PER FOOT FOR DRAINAGE.

THE ROOF WILL RESIST PENETRATION FROM FALLING OBJECTS SUCH AS A BLOCK OF ICE WEIGHING 100 LBS. DROPPED FROM A HEIGHT OF 100 FEET.

### **WALLS:**

THE WALL OUTER FINISH WILL BE AN AGGREGATE FINISH WITH AN AESTHETICALLY PLEASING EARTH TONE COLOR.

### **PANEL CONNECTION:**

THE PANEL TO PANEL CONNECTIONS WILL BE SIMPLE AND EASY USING QUICK LOCK CAM FASTENERS.

SEALANT TO BE USED IN ALL JOINTS (WALL AND CEILING, WALL TO WALL, AND WALL TO FLOOR) TO PREVENT WATER PENETRATION.

### **STRUCTURAL LOADING:**

THE FLOOR SHALL BE DESIGNED TO SUPPORT A MINIMUM LIVE LOAD OF 350 PSF WHEN SUPPORTED IN A PERIMETER GRADE BEAM FOUNDATION.

THE SHELTER WILL BE DESIGNED TO WITHSTAND WINDS IN EXCESS OF 150 MILES PER HOUR.

THE SHELTER WILL BE DESIGNED TO MEET OR EXCEED SEISMIC ZONE 4 REQUIREMENTS.

### **WEATHER RESISTANCE:**



THE SHELTER WILL BE COMPLETELY WEATHERPROOF.

**DOOR:**

THE SHELTER WILL HAVE A MINIMUM OF ONE DOOR (LOCATION TO BE SPECIFIED BY THE ORDERING ENTITY AT THE TIME OF ORDER), WHICH WILL BE MADE OF STEEL, INSULATED AND MATCHED TO A STEEL CAST-IN-PLACE FRAME. ALL STANDARD DOOR HARDWARE WILL BE INCLUDED AND INSTALLED PER INSTRUCTIONS FROM THE MANUFACTURER.

THE DOOR WILL INCLUDE A DEADBOLT LOCK, LOCKGUARD PICK PLATE AND AN HYDRAULIC DOOR CLOSER.

**INSULATION:**

THE BUILDING WILL BE INSULATED TO PROVIDE A MINIMUM OF R18.

**ELECTRICAL:**

THE ELECTRICAL SHALL CONSIST OF A 200 AMP, SINGLE PHASE 120/240 VAC SERVICE, WHICH WILL INCLUDE THE FOLLOWING ITEMS:

POWER ENTRANCE ELBOW SIZED TO THE ELECTRICAL SERVICE.

A THIRTY (30) CIRCUIT BREAKER LOAD CENTER.

ONE EXTERIOR LIGHT FIXTURE WITH 100 WATT INCANDESCENT BULB.

MULTIPLE INTERIOR FLUORESCENT (W/COLD START BALLAST) LIGHT FIXTURES WITH TWO (2) 40 WATT BULBS SUFFICIENT TO PRODUCE 70 FOOT CANDLE ILLUMINATION AS MEASURED THREE (3) FEET ABOVE THE FLOOR.

ONE DUPLEX RECEPTACLE 120 VOLT 10 AMP FOR EVERY FOUR (4) FEET OF WALL SPACE.

ONE 208/240 VOLT AC OUTLET (LOCATION TO BE SPECIFIED BY THE ORDERING ENTITY) FOR BATTERY CHARGER CONNECTION. THIS DOES NOT INCLUDE THE 208/240 VOLT OUTLETS REQUIRED FOR THE HVAC SYSTEM.

ALL ELECTRICAL INSTALLATIONS SHALL CONFORM WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC). ALL ELECTRICAL EQUIPMENT WILL BE U.L. LISTED OR EQUIVALENT.

**INTERIOR GROUNDING:**

THE BUILDING WILL INCLUDE A HALO TYPE GROUNDING SYSTEM USING A MINIMUM OF #2 AWG BARE COPPER STRANDED WIRE WITH SUFFICIENT DROPS FOR CONNECTION TO THE SITE GROUND GRID.

A 1/4" X 4" X 20" COPPER GROUND BAR SYSTEM WILL BE INSTALLED APPROXIMATELY SIX INCHES BELOW THE WAVEGUIDE ENTRY PLATE WITH A SINGLE #2 AWG SOLID TINNED COPPER EXTERNAL DROP.

**HVAC SYSTEM:**



THE BUILDING WILL BE EQUIPPED WITH (REDUNDANT) TWO VERTICAL WALL OR FLOOR MOUNTED COMPLETELY SELF CONTAINED AIR CONDITIONERS. EACH UNIT WILL INCLUDE A TIME DELAY START UP RELAY, LOW AMBIENT CONTROL, AND A FORCED AIR RESISTIVE HEAT STRIP.

THE HVAC SYSTEM WILL BE SIZED FOR THE REQUIRED COOLING AND HEATING FOR DIFFERENT BUILDING SIZES AND WILL BE WEATHER/TAMPER PROOF OF ANY OUTSIDE COILS.

**CABLE LADDER AND WIREWAY:**

12" OR 18" CABLE TRAY WALL TO WALL ALONG THE LENGTH OF THE BUILDING INCLUDING ALL TEES, WALL, ROOF SUPPORT BRACKETS, AND GROUNDING PER NATIONAL ELECTRICAL CODE AS PER THE FOLLOWING:

TEN FOOT BUILDING - ONE 12" DOWN THE CENTER WITH AN EXTENSION TO THE CABLE ENTRY.

TWELVE FOOT BUILDING - TWO 18" RUNS 3 FEET FROM THE OUTER WALLS WITH EXTENSIONS TO THE CABLE ENTRY. THE TWO (2) CABLE TRAY RUNS WILL BE CONNECTED TOGETHER WITH CABLE TRAY IN AN H CONSTRUCTION AT 8' INTERVALS.

**CABLE ENTRY:**

CABLE ENTRY (LOCATION TO BE SPECIFIED BY ORDERING ENTITY AT TIME OF ORDER) IN ACCORDANCE WITH THE FOLLOWING GUIDELINES:

EIGHT (8) PORT FOR 10' X 13' BUILDING  
TEN (10) PORT FOR 10' 24' BUILDING

TWELVE (12) PORT FOR 12' X 24' BUILDING

EIGHTEEN (18) PORT FOR 12' X 32/40' BUILDING

**SURGE ARRESTORS:**

A PRIMARY SINGLE PHASE ARRESTOR ON THE INCOMING POWER WITH ALARM CONTACTS TO SIGNAL WHEN THE SURGE PROTECTION IS LOST.

**ALARM SYSTEM:**

ALARM SYSTEM TO INCLUDE: HIGH TEMPERATURE; LOW TEMPERATURE; OPEN DOOR ALARM; POWER LOSS.

**OPERATING ENVIRONMENT AND CONTROL:**

THE SHELTER WILL BE DUST PROOF, AIRTIGHT AND WEATHER RESISTANT.

**AXILLARY GENERATOR SPACE:**

TWO OF THE BUILDINGS, 32' AND 40' LENGTH, TO ACCOMMODATE A GENERATOR IN A SEPARATE ROOM TO INCLUDE, BUT NOT LIMITED, AN EXTERIOR DOOR, EXHAUST/VENTILATION SYSTEM



WITH CONNECTION TO LP FUEL SYSTEM. THE ORDERING ENTITY WILL INSTALL ITS OWN GENERATOR OF 20, 35 OR 50 KW DEPENDING ON SITE REQUIREMENTS.

**BUILDING PLANS ARE AVAILABLE UPON REQUEST FROM THE MANUFACTURER. THE DESCRIPTION OF (1) BUILDING IS LISTED BELOW. DESCRIPTIONS OF OTHER BUILDINGS AVAILABLE FROM THE MANUFACTURE.**

Basic Building - Fibrebond Premier Twin Skin Construction System (10' W X 12' L X 9' H INSIDE)

Exterior:

- Exposed aggregate
- Mesa Tan trim
- Peak roof with 1 ½" overhang
- Membrane roofing system
- Exterior penetrations as required

Interior:

- Walls covered with white wood grain paneling over ½" plywood
- Ceiling covered with modulex ceiling tile over ½" plywood
- Floor 12" x 12" vinyl tile over concrete
- Interior trim package

Mechanical:

- 3' 6" x 7' 0" steel door with supercore and cast-in steel frame
- Door painted to match exterior trim
- Non-removable pi ball bearing hinges
- Best deadbolt with construction core
- Door pull handle
- Heavy gauge stainless steel finish lockguard
- Geavy duty positive "T-latch" door holder
- Door closure
- Magnetic weatherstripping
- Drip strip over door
- Rubber door stop
- Door sweep
- 8 hole 4" waveguide entry port with caps
- 20 ft. of 12" standard cable tray

Electrical:

- 200 amp single phase, 30 circuit load center with main lugs, Cutler Hammer
- Halo ground as specified
- Exterior ground bar with #2 solid tinned copper drop (1/4" x 4" x 20")
- Surge lightning arrestor: type: Leviton #52120-M2
- Incandescent exterior light with photocell
- Six (6) flourescent 2 bulb, 40 watt interior lights with lenses
- Thirteen (13) 20 amp duplex receptacles
- One (1) 20 amp exterior GFCI duplex receptacle
- 30 amp iterior standard battery charger outlet
- 2" NECLB with cover
- Conduit, wire, junction boxes with sealtite as required

**HVAC:**

- Two (2) 2-ton, single phase, Bard wall mounted commercial grade air conditioners with 5 kw heatstrips
- Supply and return air grills
- Low ambient kit
- Anti-cycle relay
- Bard master control, MC94AE
- 36" motorized intake damper with filter and hood
- 36" motorized exhaust damper with hood

**Alarms:**

- Intrusion alarm, Ademco #7939-2GY
- High temperature alarm
- Low temperature alarm
- A.C power fail, single phase

**PRICING SCHEDULE**

GLASS FIBER REINFORCED CONCRETE (GFRC) EQUIPMENT SHELTER, FABRICATED, PREASSEMBLED AND COMPLETE AS SPECIFIED, INCLUDING TRANSPORTATION TO SITE:

DESCRIPTION	RATE
<b>10' W X 12' L X 9' H (INSIDE)</b>	
BUILDING	\$11,803.00
TRANSPORTATION (WEIGHT 28,600 LBS)	\$1,782.00
ELECTRICAL	\$1,235.00
INTERIOR GROUND	\$802.00
HVAC SYSTEM	\$3,126.00
CABLE LADDER AND WIRE WAY	\$175.00
CABLE ENTRY	\$105.00
SURGE ARRESTER	\$525.00
ALARM SYSTEM	\$103.00
TOTAL PRICE	<b>\$19,656.00</b>
OPTION: LEVEL 4 BULLET RESISTANT DOOR	\$2,920.00
OPTION: ICE SHIELD	\$3,033.00
<b>10' W X 24' L X 9' H (INSIDE)</b>	
DESCRIPTION	RATE
BUILDING	\$17,317.00
TRANSPORTATION (WEIGHT 47,400 LBS)	\$1,945.00



ELECTRICAL	\$1,635.00
INTERIOR GROUND	\$1,010.00
HVAC SYSTEM	\$3,735.00
CABLE LADDER AND WIRE WAY	\$257.00
CABLE ENTRY	\$255.00
SURGE ARRESTER	\$525.00
ALARM SYSTEM	\$103.00
TOTAL PRICE	<b>\$26,782.00</b>
OPTION: LEVEL 4 BULLET RESISTANT DOOR	\$2,920.00
OPTION: ICE SHIELD	\$5,580.00
<b>11' 8" W X 24' L X 9' H (INSIDE)</b>	
BUILDING	\$18,343.00
TRANSPORTATION (WEIGHT 51,900 LBS)	\$2,579.00
ELECTRICAL	\$1,815.00
INTERIOR GROUND	\$1,017.00
HVAC SYSTEM	\$3,735.00
CABLE LADDER AND WIRE WAY	\$599.00
CABLE ENTRY	\$137.00
SURGE ARRESTER	\$525.00
ALARM SYSTEM	\$103.00
TOTAL PRICE	<b>\$28,853.00</b>
OPTION: LEVEL 4 BULLET RESISTANT DOOR	\$2,920.00
OPTION: ICE SHIELD	\$6,265.00
<b>11' 8" W X 32' L X 9' H (INSIDE)</b>	
BUILDING	\$22,163.00
TRANSPORTATION (WEIGHT 65,600 LBS)	\$2,814.00
ELECTRICAL	\$2,194.00
INTERIOR GROUND	\$1,155.00
<b>DESCRIPTION</b>	<b>RATE</b>
HVAC SYSTEM	\$4,800.00
CABLE LADDER AND WIRE WAY	\$768.00



CABLE ENTRY	\$196.00
SURGE ARRESTER	\$525.00
ALARM SYSTEM	\$103.00
TOTAL PRICE	<b>\$34,718.00</b>
OPTION: LEVEL 4 BULLET RESISTANT DOOR	\$2,920.00
OPTION: ICE SHIELD	\$8,166.00
<b>11' 8" W X 40' L X 9' (INSIDE*)</b>	
BUILDING	\$31,170.00
TRANSPORTATION (WEIGHT 44,200 LBS)	\$4,760.00
ELECTRICAL	\$2,564.00
INTERIOR GROUND	\$1,294.00
HVAC SYSTEM	\$5,132.00
CABLE LADDER AND WIRE WAY	\$1,047.00
CABLE ENTRY	\$196.00
SURGE ARRESTER	\$525.00
ALARM SYSTEM	\$103.00
TOTAL PRICE	<b>\$46,791.00</b>
OPTION: LEVEL 4 BULLET RESISTANT DOOR	\$2,920.00
ICE SHIELD	\$9,995.00
* SHELTER WILL BE CONSTRUCTED IN TWO PIECES	
<b>11' 8" W X 32' L X 9' H (INSIDE) BUILDING WITH SPACE FOR A GENERATOR (20 KW)</b>	
BUILDING	\$25,908.00
TRANSPORTATION (WEIGHT 65,600 LBS)	\$2,814.00
ELECTRICAL	\$3,233.00
INTERIOR GROUND	\$1,155.00
HVAC SYSTEM	\$3,738.00
CABLE LADDER AND WIRE WAY	\$768.00
CABLE ENTRY	\$196.00
<b>DESCRIPTION</b>	<b>RATE</b>
SURGE ARRESTER	\$525.00
ALARM SYSTEM	\$155.00





TOTAL PRICE	<b>\$38,492.00</b>
OPTIONAL COST: 35 KW	NO INCREASE
OPTIONAL COST: 50 KW	NO INCREASE
NOTE: COST FOR BUILDING TO ACCOMMODATE GENERATOR ONLY - STATE WILL SUPPLY AND INSTALL GENERATOR AND TRANSFER SWITCHING PANEL.	
OPTION: LEVEL 4 BULLET RESISTANT DOORS	\$5,840.00
OPTION: ICE SHIELD	\$8,166.00
<b>11' 8" X 40' L X 9'H (INSIDE) BUILDING WITH SPACE FOR A GENERATOR (20KW)*</b>	
BUILDING	\$34,600.00
TRANSPORTATION (WEIGHT 44,200 LBS)/HALF	\$4,760.00
ELECTRICAL	\$2,697.00
INTERIOR GROUND	\$1,294.00
HVAC SYSTEM	\$4,800.00
CABLE LADDER AND WIRE WAY	\$1,046.00
CABLE ENTRY	\$196.00
SURGE ARRESTER	\$525.00
ALARM SYSTEM	\$155.00
TOTAL PRICE	<b>\$50,073.00</b>
OPTIONAL COST: 35 KW	NO INCREASE
OPTIONAL COST: 50 KW	NO INCREASE
NOTE: COST FOR BUILDING TO ACCOMMODATE GENERATOR ONLY - STATE WILL SUPPLY AND INSTALL GENERATOR AND TRANSFER SWITCHING PANEL.	
* SHELTER WILL BE CONSTRUCTED IN TWO PIECES	
OPTION: LEVEL 4 BULLET RESISTANT DOOR	\$5,840.00
OPTION: ICE SHIELD	\$9,995.00
<b>10' W X 10' L X 8' H (INSIDE) BUILDING FOR GENERATOR (20 KW) AND TELECOMMUNICATION BATTERIES</b>	
BUILDING	\$12,260.00
TRANSPORTATION	\$1,782.00
<b>DESCRIPTION</b>	<b>RATE</b>
ELECTRICAL	\$842.00
INTERIOR GROUND	\$539.00
HVAC SYSTEM	N/A



CABLE LADDER AND WIRE WAY	N/A
CABLE ENTRY	N/A
SURGE ARRESTER	N/A
ALARM SYSTEM	N/A
TOTAL PRICE	<b>\$15,423.00</b>
OPTIONAL COST: 35 KW	NO INCREASE
OPTIONAL COST: 50 KW	NO INCREASE
NOTE: COST FOR BUILDING TO ACCOMMODATE GENERATOR ONLY - STATE WILL SUPPLY AND INSTALL GENERATOR AND TRANSFER SWITCHING PANEL.	
OPTION: LEVEL 4 BULLET RESISTANT DOOR	\$2,920.00
OPTION: ICE SHIELD	\$2,640.00

FINET COMMODITY CODES(S): **FOR AGENCY USE ONLY**

91316000000 - CONSTRUCTION, COMMUNICATION EQUIPMENT (INCLUDING ANTENNA TOWERS)  
15512000000 - BUILDING (500 SQ FT AND UNDER)  
15579000000 - SHELTERS, NON-INSULATED